DEPARTMENT OF THE AIR FORCE
ARMSTRONG LABORATORY (AFMC)
BROOKS AIR FORCE BASE, TEXAS

OCCUPATIONAL AND ENVIRONMENTAL HEALTH DIRECTORATE
RADIOFREQUENCY RADIATION DIVISION
Brooks Air Force Base Texas 78235-5234

Cover plus 2 Date: 1 Aug 96

TO: **HONORABLE REED E. HUNDT**
Chairman
Federal Communications Commission
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From: **Dr. Murphy**
Chairman
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Comments:

SUBJECT: FCC draft proposal for ET Docket No. 93-62, "Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation".

The attached letter is a TERP recommendation for alternative action on FCC proposal.
TERP recommends:

1. That FCC adopt ANSI/IEEE C95.1-1992 as an interim standard.

2. That the Federal agencies with expertise in RFR safety issues and Health and Occupational Safety responsibility (EPA, NIOSH, FDA, OSH, and DoD-TERP) join in public forum with IEEE SCC-28 as it updates the C95.1 Standard.

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1 Aug 96

Honorable Reed E. Hundt
Chairman
Federal Communications Commission
1919 M Street, N.W.
Washington D.C. 20554

Dear Mr Hundt:

At the request of the Tri-Service members of the Interdepartmental Radio Advisory Committee (IRAC), the Department of Defense (DoD) Tri-Service Electromagnetic Radiation Panel (TERP) has reviewed the 2 July 96 Draft proposed guidelines on the Federal Communications Commission (FCC) Notice of Proposed Rule Making (Notice) ET Docket No. 93-62, "Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation". Although the Tri-Services agree with the goal for development of a consensus on the guidelines adopted by the FCC, we believe that the proposed guidance has not received appropriate open/public review by a sufficiently large enough body of identified radiofrequency health and safety experts to be considered a valid consensus document.

The DoD is responsible for the health and safety of all its personnel and operates several thousand radiofrequency emitting systems. The DoD is committed to providing a safe environment to protect personnel health and preserve defense capability. The TERP is the designated DoD Technical and Policy Advisor for all aspects of Electromagnetic Radiation Safety issues and is the functional area expert for Health Effects and Protective Measures. The TERP is authorized and qualified to comment on RF Safety and Occupational Health issues.

The TERP remains fully supportive of DoD comments dated 12 Aug 93 on the original Notice which proposed to adopt the American National Standards Institute (ANSI) and Institute of Electrical and Electronics Engineers (IEEE) Standard, ANSI/IEEE C95.1-1992. In the Notice, FCC noted that the ANSI/IEEE C95.1-1992 Standard (ANSI/IEEE C95.1) reflects recent scientific studies of the biological effects of RF radiation and that use of this standard would thus ensure that FCC regulated facilities comply with the latest safety standards for RF exposure. The TERP agrees.

The TERP does not find any compelling technical reasons for the Services to discontinue observing the recommended limits described in ANSI/IEEE C95.1 or for abandoning Department of Defense Instruction 6055.11 (DoDI 6055.11) "Protection of DoD Personnel from Exposure to Radiofrequency Radiation and Military Exempt Lasers" which is based on ANSI/IEEE C95.1.

The DoD supports Federal use of voluntary nongovernmental consensus standards, such as ANSI/IEEE C95.1. Office of Management and Budget policy (Circular No. A-119 Federal Participation in the Development and Use of Voluntary Standards, 20 Oct 93) requires that the "Federal Government rely on voluntary standards, both domestic and international, whenever feasible and consistent with the law and regulation pursuant to law" The ANSI/IEEE C95.1 meets these requirements; neither the National Council on Radiation Protection (NCRP) 1986 Report nor the proposed guideline do.

It is important that FCC consider an internationally accepted consensus standard to provide global uniformity. ANSI/IEEE C95.1 has been used as a basis for several safety guidelines, including the new North Atlantic Treaty Organization (NATO) Standardization Agreement (STANAG) 2345. That

international standard was unanimously endorsed, on 16 Apr 96, by the 16 member nations of the General Medical Working Party of the NATO Military Agency For Standardization. The French government has also recently incorporated the exposure limits of STANAG 2345 for the controlled environment. The international acceptance of the ANSI/IEEE C95.1 Standard will facilitate compatibility, commonality, and interchangeability of RF communication systems and equipment.

Growing public and international confidence in the ANSI/IEEE C95.1 is based on the consensus developed by a large number of contributing experts (over 120) from over 14 different disciplines including scientists, public heath officials, medical doctors and technical experts. The experts came from industry, academia, and government agencies including DoD, the Department of Energy (DoE), the Environmental Protection Agency (EPA), the National Institute for Occupational Safety and Health (NIOSH), the Food and Drug Administration (FDA), and the Occupational Safety and Health Administration (OSHA). No agency or group exerted dominating influence on that consensus process.

The lack of confidence in the 1986 NCRP Report process is due to the extremely small by invitation only membership, and the fact that it was not a consensus process. The lack of open public review of the current proposed guidance will engender a similar lack of confidence. The TERP notes that many of the original NCRP committee members and its support scientists later helped draft the newer ANSI/IEEE C95.1 Standard and that many of these same leading experts have recommended the FCC adopt the ANSI/IEEE C95.1 Standard over the NCRP 1986 Report or any proposed hybrid.

The TERP supports the FCC's view in Notice No. 93-62 that recognizes the importance of "coordinated actions to develop consistent approach to the treatment of RF exposure environments ..." This is especially important since ANSI/IEEE C95.1 Standards have served to coordinate RF protection efforts among industry, military, and government agencies for the last 30 years. If the ANSI/IEEE C95.1 is not adopted by FCC, all of the agencies and industry users that have adopted the 1992 Standard will suffer loss of credibility and the resulting confusion and lack of coordinated action will lead to further public distrust and concern.

The ANSI/IEEE C95.1 is a living standard supported by active standing committees to provide interpretations, periodic updates, and adjunct documents such as its companion, ANSI/IEEE C95.3-1991 *Recommended Practice for Measurement of RF*. There are no plans by NCRP nor within the FCC proposed guideline to provide continued review, interpretations, or updates.

The Tri-Services strongly recommends the FCC stay the course with their Notice, and maintain the consistent approach to the control of RF environments that civilian and military users have successfully applied over the last few decades as our country continues to develop and enjoy the full potential and benefits of the RF spectrum.

The Tri-Services recommends that the FCC adopt, as an interim Standard, the ANSI/IEEE C95.1. We further recommend that the EPA, FDA, NIOSH, OSHA and the TERP join together, in open-public forum, with the IEEE Standards Coordinating Committee 28, as it updates the ANSI/IEEE C95.1 Standard and thereby produce a truly national standard.

Michael R. Murphy

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